INSTRUCTIONS

-J04811 REV. 2015-04-14

XL STOP/TAIL/TURN SIGNAL AND LICENSE PLATE RELOCATION KIT

GENERAL

Kit Number

73279-10

Models

For model fitment information, see the P&A retail catalog or the Parts and Accessories section of www.harley-davidson.com (English only).

Additional Parts Required

This kit is needed in order to complete the installation of saddlebag kits on specific model motorcycles. See the P&A retail catalog or the Parts and Accessories section of www.harley-davidson.com (English only) for available saddlebag kits, model fitment information and additional part requirements.

Tools and Supplies Required

The help of an assistant will be needed for some removal and installation procedures.

A terminal pick (Snap-On® TT600-3 or equivalent) will aid in the installation of this kit.

Loctite® 271 Threadlocker and Sealant - Red (H-D Part No. 99671-97) is required for the proper installation of this kit.

Electrical Contact Lube (H-D Part No. 99861-02) or equivalent is required for the proper installation of this kit.

⚠WARNING

The rider's safety depends upon the correct installation of this kit. Use the appropriate service manual procedures. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00333a)

NOTE

This instruction sheet refers to service manual information. A service manual for this year/model motorcycle is required for this installation and is available from a Harley-Davidson dealer.

Kit Contents

See Figure 5 and Table 1.

INSTALLATION

Preparation

1. Position the vehicle on a motorcycle lift under the frame so the vehicle is upright and level.

⚠WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, remove main fuse before proceeding. (00251b)

2. Refer to the service manual and follow the instructions given to remove the main fuse.
3. Follow the service manual instructions to remove the seat.
4. Raise the rear of the vehicle to relieve the load on the shock absorbers.
5. Follow the service manual instructions to remove **only the bottom end** shock absorber fasteners on each side of the vehicle. Save the fasteners for later assembly.

NOTE

***Upper end** shock absorber fastener removal may be required for installation of specific saddlebags. Refer to the instructions **found with the saddlebags** for further information.*

6. Raise the rear of the vehicle further to allow access to the underside of the rear fender.

Electrical Disconnection

1. Unclip the ECM from the electrical caddy per service manual instructions with the following exception:
   a. Unplugging the ECM wiring harness connector [78B] from the ECM is not required. Electrical connectors are identified in the service manual by the number and letter within brackets.

      Gently lay the ECM to the left side to expose the four-way stop/tail/turn signal (STT) connectors [18] and [19] and two-way license plate illuminator connector [40] beneath.
2. Identify and clearly label the left and right STT harnesses **on the vehicle side** of the harness connections.

NOTE

*Make note of the wire colors and cavity locations before removing the terminals from the socket housings **on the lamp side** of the harness connections.*

3. Remove the wires and socket terminals from the STT socket housings [18B] and [19B]. Remove the wires and socket terminals from the license plate illuminator socket housing [40B].

   Set the socket housings aside for later installation.

Rear Fender, Lamp and License Bracket Removal

NOTE

The reflector mounting block is held to the fender with double sided tape. Take care during removal to avoid scratching paint.

1. Remove the rear reflector and mounting block from the underside of the rear fender.

   Remove any residual adhesive from the underside of the fender.

2. Remove the license plate from the vehicle (if installed). Retain the plate and attaching hardware.

NOTE

Note the location and orientation of rear fender mounting hardware, and save for later assembly.

3. Refer to the service manual and follow the instructions given to remove and disassemble the rear fender and license plate bracket, with the following exceptions:
   a. The fender will not be completely removed from the vehicle.
   b. Rear wheel elevation and removal is not necessary.
   c. ECM caddy and rear fender extension removal are not required. The seat post needs only to be loosened, not removed.

4. Have an assistant raise or lower the fender to allow access to the two rearmost rivets on the left side of the vehicle. Drill out the rivets **on the left side only** to remove the license plate bracket mount assembly.

NOTE

Take care when disengaging the license plate illuminator harness from the license plate bracket mount and fender.

5. Remove the license plate illuminator from the license plate bracket mount assembly. Save the illuminator. The bracket mount and screws can be discarded.

License Bracket Assembly

1. See Figure 5. Get the **new** license plate bracket (5), illuminator cover (6), spacer (8) and two M4 screws (7) from the kit, and the license plate illuminator (A):

- Removed from the original equipment (OE) license plate bracket on US models only.
- Purchased separately on all other models.

2. See Figure 1. Assemble the illuminator (1), spacer (2) and cover (3) to the license plate bracket (5) in the sequence shown, and tighten the screws (4) securely.

3. Get the STT relocation weldment (6), two screws (7) and two flat washers (8) from the kit.

4. Apply a few drops of Loctite 271 - Red to the **clean** screw threads.

   Assemble the license plate bracket to the weldment as shown, and tighten the screws to 120 **in-lbs** (13.6 N-m).

NOTE

If using a metal tool to install the black nuts, protect the finish with cloth or paper to prevent damage.

5. Loosely install the black painted nuts (9) onto the threaded studs on each side of the STT relocation weldment.

6. Get the rear reflector (10) from the kit.

7. Clean the reflector mounting area of the license bracket with a mixture of 50-70% isopropyl alcohol and 30-50% distilled water. Allow to dry thoroughly.

NOTE

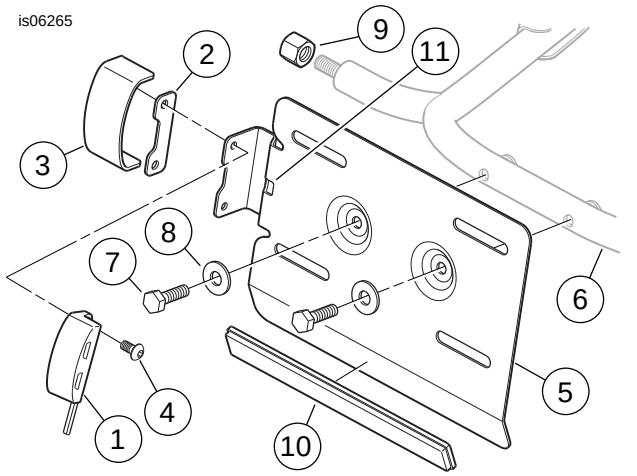
*Ambient temperature should be **at least** 60 °F (16 °C) for proper adhesion of the reflector to the bracket.*

8. Remove the liner from the adhesive backing of the reflector. Carefully position the reflector, centered both horizontally and vertically, to the reflector mounting area of the bracket, and press firmly into place. Hold the reflector in position with steady pressure for about one minute.

NOTE

Allow AT LEAST 24 hours after applying the reflector before exposing the area to vigorous washing, strong water spray or extreme weather.

The adhesive bond will increase to maximum strength after about 72 hours at normal room temperature.



1. **License plate illuminator**
2. **Spacer**
3. **Illuminator cover**
4. **Button head screw (2)**
5. **License plate bracket**
6. **STT relocation weldment**
7. **Hex head screw (2)**
8. **Flat washer (2)**
9. **Black painted nut (2)**
10. **Rear reflector**
11. **License plate bracket square hole**

Figure 1. License Plate Illuminator Installation

Rear Lamp Wiring

1. Remove the STT lamps from the rear fender support covers per service manual instructions.

NOTE

If necessary, apply a light coat of liquid soap, window cleaner or all-purpose lubricant to the license plate illuminator wire ends and conduit. Use a fish tape or mechanics' wire if needed to guide the wires through the tube.

2. See Figure 1. Feed the license plate illuminator wire conduit through the square hole (11) on the left side of the license plate bracket.

3. See Figure 5. Guide the wire and conduit into the hole (C) in the STT relocation weldment (1) tube, and push the wires past the Y-joint (D) on the left side of the tube.

4. Get three **new** terminated wires, one black (12), one violet (11) and one blue (10) from the kit.

5. Feed the **unterminated end** of **one** wire into the left-side threaded stud (E) on the STT relocation weldment. Guide the wire into the tube, and push the wires past the Y-joint.

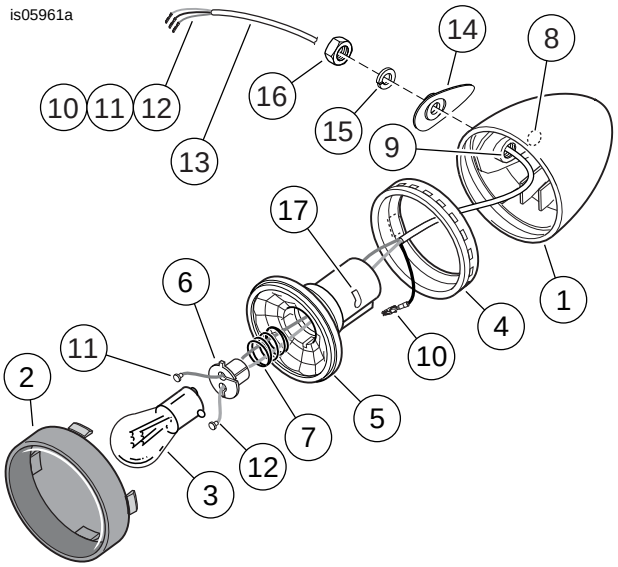
6. Feed the **unterminated end** of the **second** wire into the threaded stud, favoring the inside of the curve. Guide both wires and the license plate illuminator wire conduit into the tube until the second wire gets past the Y-joint.

7. Feed the **unterminated end** of the third wire into the threaded stud, favoring the inside of the curve. Guide all the wires and conduit into the tube until the first wire end comes out through the left forward opening (F) of the tube.

   Continue pulling and pushing the wires until all the wire ends are exposed.

8. Pull the license plate illuminator wire conduit through the tube until the slack is taken up at the license plate bracket. Pull a small amount of slack back as wire relief.

   Use a cable strap (not provided) to bind the license plate illuminator wire conduit to the STT relocation weldment near hole (C).



1. **Housing**
2. **Lens**
3. **Bulb**
4. **Gasket**
5. **Reflector**
6. **Bulb socket**
7. **Spring**
8. **Unthreaded hole**
9. **Threaded hole**
10. **Black wire**
11. **Violet wire**
12. **Blue wire**
13. **Protective tubing**
14. **Recess cover**
15. **Lockwasher**
16. **Jam nut**
17. **Hole in bulb socket cavity**

Figure 2. Stop/Tail/Turn Signal Lamp (Right Side Shown)

9. See Figure 2. Insert the blade of a small screwdriver into the slot at the bottom of the lens (2) of the left-side STT lamp, and twist to unsnap the lens from the housing (1).

   Push the bulb (3) in and rotate counterclockwise to remove. Set the lens and bulb aside for later installation.

NOTE

Make note of the cavity location and color of each wire in the reflector bulb socket (6) before removing. The violet wire (11) should be closest to the locating tab on the bulb socket. New wires from the kit must be installed in the same cavities.

10. Note the location and color of the two wires in the reflector bulb socket (6). Slide the bulb socket and spring (7) from the reflector (5). Remove the wires and button terminals from the bulb socket.

11. Insert a right-angle pick or a 7/64 (3 mm) hex key into the bulb socket cavity, hooking into the hole (17). Pull the reflector free of the lamp housing.

    Separate the rubber gasket (4) from the reflector or housing.

12. Remove the ground terminal and black wire (10) from the back of the reflector.

    Guide the protective tubing (13) with all three wires out of the unthreaded hole (8) in the lamp housing, and discard.

NOTE

*Be sure the recess cover, lockwasher and jam nut have been installed in the **exact** orientation and sequence shown **before** feeding the wiring through the stop/tail/turn signal housing.*

13. Place a lockwasher (15) onto the left-side threaded stud, against the jam nut (16) already installed on the STT relocation weldment. Place a black recess cover (14), in the orientation shown, onto the stud.

14. Insert the wires from the left-side threaded stud on the STT relocation weldment through the **threaded** hole (9) in the lamp housing (1) and the center of the rubber gasket (4).

15. Screw the lamp housing onto the stud. Be careful that the wires are not twisted or damaged as the weldment stud and lamp are assembled. Align the recess cover over the holes and recess in the lamp housing. The lockwasher will fit inside the hole in the recess cover.

    Align the lamp housing so that the lens will be aimed rearward and parallel to the ground. While holding the housing in position, hand tighten the jam nut against the lockwasher.

16. Insert the terminal of the **new** black wire (10) into the cavity in the rear of the reflector (5) until it clicks into place.

    Thread the blue wire (12) and violet wire (11) through the center of the reflector (5), and the spring (7), and insert the button terminals into the correct slots and cavities in the reflector bulb socket (6).

17. Assemble the lamp as follows:
    a. Insert the spring and bulb socket back into the reflector, aligning the tab on the socket with the slot in the reflector.
    b. Seat the reflector assembly in the rubber gasket, aligning the tab on the reflector with the slot in the gasket.
    c. Install the reflector assembly, aligning the tab on the reflector with the slot inside the lamp and leaving about 1-2 inches (50-100 mm) of wire **inside** the lamp housing.

       Carefully pull the individual wires at the front opening of the STT weldment to remove excess wire from inside the tube.
    d. Using the thumbs of both hands, apply even pressure around the outer edge of the reflector assembly until fully seated.
    e. Liberally apply electrical contact lubricant (H-D Part No. 99861-02) or equivalent to the contacts in the reflector socket and at the base of the bulb. Push in the bulb and rotate clockwise to install.
    f. Install the lens to the lamp housing and gently apply thumb pressure until it snaps into place. Rotate the lens to position the slot at the bottom of the lamp.

18. See Figure 5. Get the protective tubing (14) from the kit, and cut into two equal-length pieces.

NOTE

If necessary, apply a light coat of liquid soap, window cleaner or all-purpose lubricant to the inside and outside of the protective tubing.

19. Slide one piece of protective tubing over the three STT lamp wires and into the forward opening (F) of the STT relocation weldment on each side. Continue sliding the tubing over the wires until it reaches at least as far as the Y-joint, or preferably all the way to the STT lamp housing.

20. Repeat steps 4 through 19 for the right-side STT lamp.

Rear Fender, Lamp and License Bracket Installation

1. See the Figure 5 top inset. Get the left-side reflector mounting bracket (22) and pop rivets (23) from the kit. Position the bracket to the inside left of the fender, aligning the mounting holes with the holes in the fender from the drilled-out rivets. Refer to the similar bracket on the right side.

2. Install the bracket to the fender, inserting the pop rivets from the **outside** of the fender.

3. **For US models only:**

   Ambient temperature should be **at least** 60 °F (16 °C) for proper adhesion of the reflector to the bracket.
   a. Get the rear reflector (L), purchased separately.
   b. Clean the reflector mounting area of the bracket with a mixture of 50-70% isopropyl alcohol and 30-50% distilled water. Allow to dry thoroughly.
   c. Remove the liner from the adhesive backing of the reflector. Carefully position the reflector, centered both horizontally and vertically, to the reflector mounting area of the bracket, and press firmly into place. Hold the reflector in position with steady pressure for about one minute.

NOTE

Allow AT LEAST 24 hours after applying the reflector before exposing the area to vigorous washing, strong water spray or extreme weather.

The adhesive bond will increase to maximum strength after about 72 hours at normal room temperature.

4. Have an assistant raise or lower the fender to the approximate mounted position. Tighten the seat post finger tight.

NOTE

***On H-D Smart Security System-equipped vehicles:** Make sure the antenna harness feeds up between the oil tank and fender on the right side of the vehicle, and is not pinched between the fender and the frame crossmember.*

5. **If installing saddlebags or docking points:**
   a. Get the fender mounting hardware from the saddlebag or docking point kit, and install per the instructions in **that** kit.
   b. Proceed to Step 6.

If NOT installing saddlebags or docking points:

a. Get the OE fender mounting hardware removed earlier.

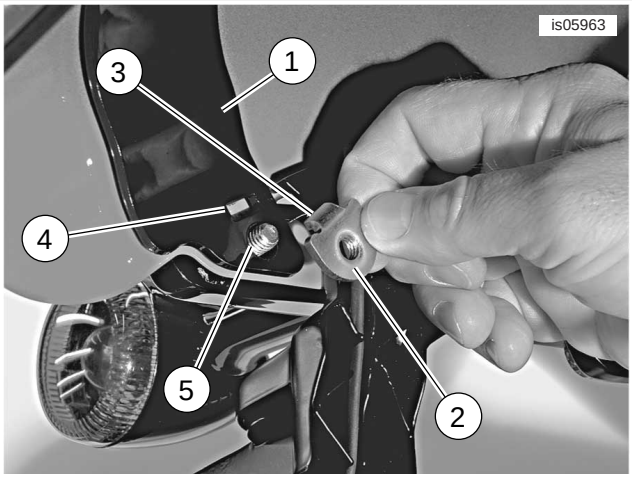
b. Place a washer over the screw threads, and install the screws through the forward hole in the fender support cover, fender support and fender on each side of the vehicle.

c. Thread the nuts onto the screws, but do not fully tighten at this time.

d. See Figure 3. Make certain that the tab (3) on each nut plate (2) fits into the slot (4) in the fender brace (1) when securing the nut plate with the rearmost fender mounting screw (5).

e. Place a washer over the screw threads, and install the remaining screws through the rearmost hole in the fender support cover, fender support and fender on each side of the vehicle.

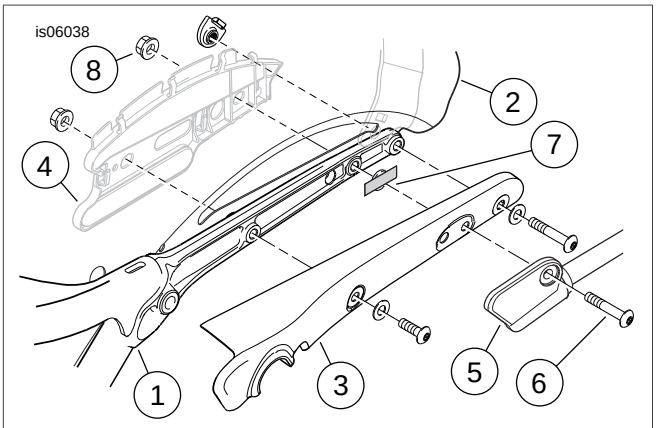
f. Thread the tabbed nut plate onto the screws, and tighten the screws enough to hold the tabs in the fender brace slots.



1. **Rear fender brace**
2. **Nut plate (2)**
3. **Tab**
4. **Slot**
5. **Mounting screw (2)**

Figure 3. Rear Fender Nut Plate

6. See Figure 4. Get the rear fender support covers (3) removed earlier, the STT relocation assembly (5) from the previous section, and two 5/16-18 TORX® button head screws (6), spacers (7) and hex flange nuts (8) from the kit.



1. **Rear fender support**
2. **Rear fender**
3. **Rear fender support cover**
4. **Reflector mount bracket**
5. **Tail/stop/turn signal relocation assembly**
6. **TORX head screw**
7. **Spacer**
8. **Hex flange nut**

Figure 4. Rear Fender Assembly

7. On each side of the vehicle, position a spacer over the **second-rearmost** hole on the fender support as shown. Use a piece of masking or household tape to hold the spacer to the rear fender support (1). Make a hole in the tape for the screw to pass through.

8. With an assistant holding the STT relocation assembly in place, insert a screw through the forward mounting hole in the relocation assembly, the second-rearmost hole in the support cover, the spacer, the fender support and the mounting hole in the rear fender.

   Install the flange nut onto the screw threads, but do not fully tighten at this time.

9. Repeat Steps 6 through 8 for the opposite side of the vehicle.

10. Tighten all fender mounting hardware in the following sequence:

    a. Tighten the screw and seat post to 8-13 ft-lbs (10.8-17.6 Nm).

    b. **If INSTALLING docking points:** Tighten the forward and rearmost fender support screws (with docking points) on both sides of the fender to 21-25 ft-lbs (28.5-33.9 Nm).

       If NOT INSTALLING docking points: Tighten the forward and rearmost fender support screws on both sides of the fender to 11-18 ft-lbs (14.9-24.4 Nm).

    c. Center the relocation bracket up and down in its range of motion, then tighten the relocation bracket screws to 21-25 ft-lbs (28.5-33.9 Nm).

    d. Align the STT lamps so that the lenses are aimed straight rearward for proper visibility. Protect the finish of the black nuts with cloth or paper to prevent damage. While holding the lamp housings in position, tighten the black left and right jam nuts against the lockwashers to 8-13 ft-lbs (14.9-24.4 Nm).

Rear Lamp Wiring Connection to Vehicle

1. Refer to the notes made during the removal steps, and insert the license plate illuminator wiring socket terminals into the correct cavities of the two-way socket housing removed earlier.
2. See Figure 5. Get the license plate illuminator harness extension (15), pin housings (24) and (25), socket housing (26) and (27) from the kit. On 2013 and earlier models, connect items (24) and (26) to the ends of the wire harness (15). On 2014 and later models, connect items (25) and (27) to the ends of the wire harness (15). Connect the pin housing to the license plate illuminator socket housing.
3. On the left side, route the license plate illuminator wiring and protective tubing through the three **upper** clips (G) on the reflector bracket (22), behind the wide plastic clip (J) on the plastic rear fender extension (mud flap) toward the front of the fender and out through the wire pass-through hole (K) in the fender.
4. On each side, route the STT wires and protective tubing through the three **lower** clips (H) on the reflector bracket, behind the wide plastic clip and out through the wire pass-through hole.
5. Route the STT wires and protective tubing over to the four-way STT connectors [18A] and [19A] on the vehicle harness. Allow an extra 2-4 inches (50-100 mm) to easily make the connections, and cut the unterminated wires and tubing.
6. Get the six socket terminals (13) from the kit, and the four-way socket housings removed from the original wires.
7. Follow the instructions in the service manual to crimp the terminals onto the STT wires.

   Refer to the notes made during the removal steps, and insert the STT socket terminals into the correct cavities of the socket housings.
8. Connect the socket housings to the pin housings ([18A], right and [19A], left) on the vehicle harness. Tuck the connectors and wiring into the area under the seat.
9. Install the ECM into the ECM caddy, and adjust the wiring to best fit securely and safely under the seat.

Return to Service

NOTE

*If the **upper end** shock absorber fasteners were removed for saddlebag installation, install them at this time. Refer to the instructions found with the saddlebags or in the service manual for further information.*

1. Follow the service manual instructions to install the bottom shock absorber fasteners on each side of the vehicle.
2. Lower the motorcycle lift, and allow the vehicle to rest on the jiffy stand.

⚠WARNING

After installing seat, pull upward on seat to be sure it is locked in position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070b)

3. Follow the service manual instructions to install the seat.

NOTE

*Verify that the ignition key switch is in the OFF position **before** installing the main fuse.*

4. Refer to the service manual and follow the instructions given to install the main fuse.
5. Turn the ignition key switch to IGNITION, but do not start the motorcycle.

   Check the tail, stop, rear turn signal and license lamps for proper operation.
6. Install the license plate (if present) to the vehicle with the attaching hardware from the OE installation.

SERVICE PARTS

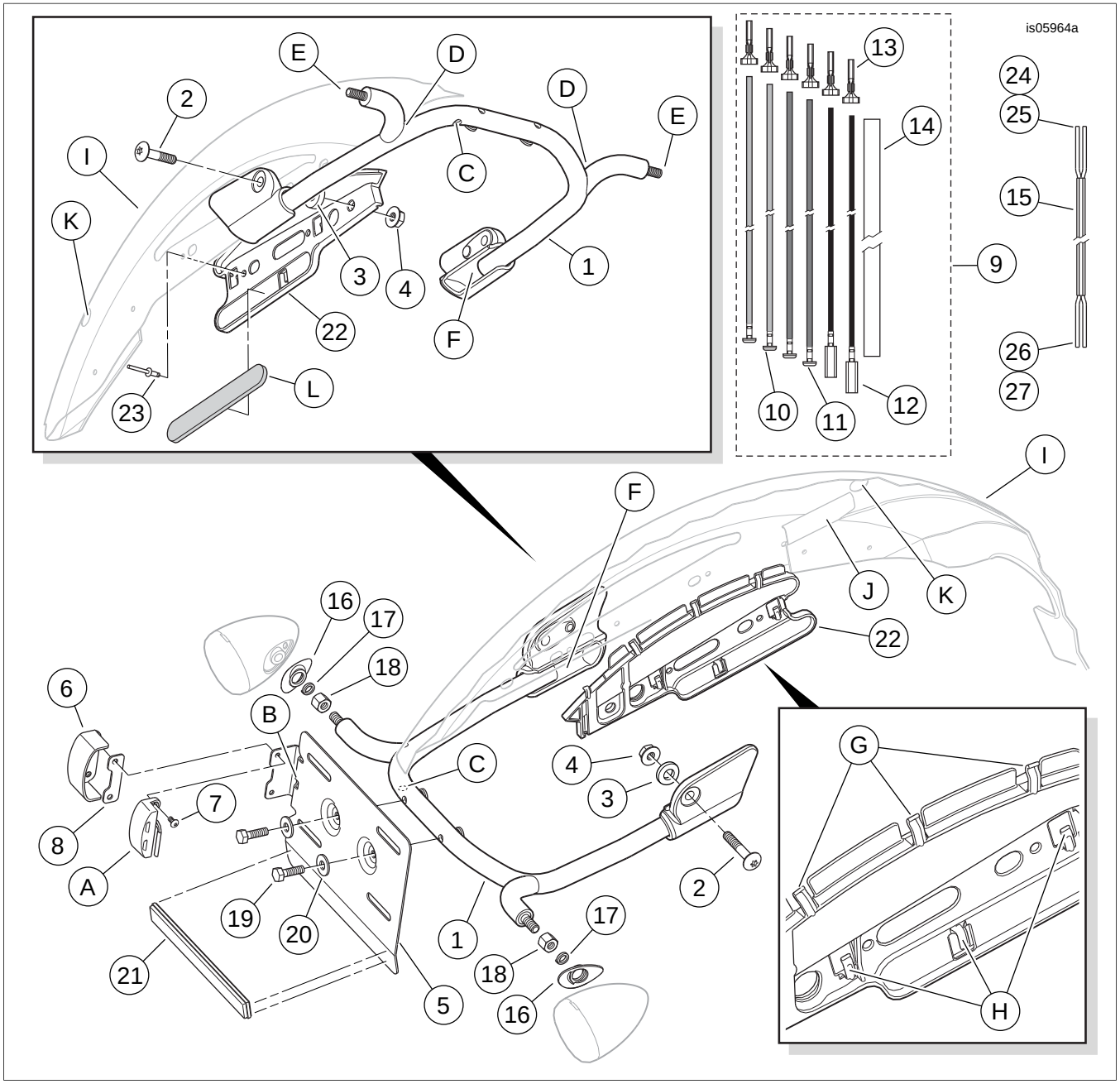


Figure 5. Service Parts, XL Rear Stop/Tail/Turn Signal and License Plate Relocation Kit

SERVICE PARTS

Table 1. Service Parts

Item	Description (Quantity)	Part Number
1	Stop/tail/turn signal (STT) relocation weldment	Not sold separately
2	Screw, button head, TORX®, 5/16-18 x 1-5/8 inch (41 mm) long (2)	3148
3	Spacer washer, 0.22 inch (5.6 mm) thick (2)	5792
4	Flanged hex nut, 5/16-18 (2)	7531
5	Bracket, license plate	Not sold separately
6	Cover, license plate illuminator	Not sold separately
7	Hex socket, button head cap screw, M4-0.7 x 0.31 inch (8 mm) long (2)	3146M
8	Spacer, license plate illuminator	Not sold separately
9	Wire harness components, turn signal (includes items 10-14)	Not sold separately
10	• Wire, blue (2)	Not sold separately
11	• Wire, violet (2)	Not sold separately
12	• Wire, black (2)	Not sold separately
13	• Socket terminal, #18-22 gauge (6)	Not sold separately
14	• Protective tubing	Not sold separately
15	Harness extension, license plate illuminator	Not sold separately
16	Recess cover, turn signal housing, black (2)	68864-10
17	Lockwasher, helical spring, 5/16 inch (8 mm) nominal ID (2)	7042
18	Hex jam nut, black, 5/16-24 (2)	Not sold separately
19	Screw, hex head, 1/4-20 x 7/8 inch (22 mm) long (2)	3802W
20	Flat washer, 1/4 inch (6.4 mm) nominal ID (2)	6235
21	Reflector (rear), red	59988-72A
22	Bracket, reflector mount (left)	68857-07
23	Pop rivet (2)	8692
24	Housing, amp 2-way socket	73152-96BK
25	Housing, amp 3-way socket	73153-96BK
26	Housing, amp 2-way pin	73102-96BK
27	Housing, amp 3-way pin	73103-96BK
Items mentioned in text, but not included in kit:		
A	Original equipment (OE) license plate illuminator (US models only) License plate illuminator, H-D Part No. 68183-07 (all other models)	
B	Square hole in license plate bracket	
C	Illuminator wire entrance hole in STT relocation weldment tube	
D	Y-joint (right and left) in STT relocation weldment tube	
E	STT lamp wire entrance hole (right and left) in relocation weldment tube	
F	Forward end of turn signal relocation weldment tube (right and left)	
G	Upper clips (3) on reflector bracket (Item 22)	
H	Lower clips (3) on reflector bracket (Item 22)	
I	Rear fender (cutaway view)	
J	Wide wire clip (right and left) on plastic rear fender extension (mud flap)	
K	Wire pass-through hole (right and left) in fender	
L	Left-side reflector (red), H-D Part No. 69490-07 (required for US models only)	